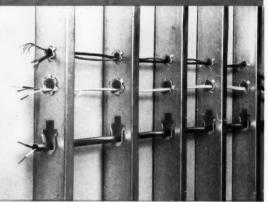
GREENLEE TRI-LOK Insulators and Stud Punches



The Contractor's Choice for wiring through metal studs.

- TRI-LOK insulators lock securely into metal studs from 24 gauge through 10 gauge thickness.
- Protect wire and cable insulation from sharp metal edges.
- Make pulling smooth and easy by preventing hang-ups.
- Insulate against noise when used with metal conduit.



711 Insulator Fits 7/8" hole punched by 709



712 Insulator Fits 1-11/32" hol punched by 710



714 insulator
For manufacturer
prepunched hole
in 1-5/8" stude



For manufacturer prepunched holes in 3-5/8" studs

Stud Punches



No. 709 for punching 7/8" and No. 710 for punching 1-11/32" dia. holes in metal studs up through 20 gauge.

- · Single stroke punching saves time on the job.
- · Automatically centers holes on standard 3-5/8" studs.
- · Self-stripping design eliminates punch hang-ups.
- Contoured handle allows punching of studs as close as 12" centers.



GREENLEE

The Contractor's Choice
GREENLEE TOOL COMPANY
advision of Ex-Cell-O

2330 23rd Avenue Rockford, IL 61108 USA 800/435-0786, in Illinois call 815/399-3903

Circle 288 Reader Service Card

Semiannual Editorial Index _

January-June 1985

Associations

ACEC's Management Clambake In Boston Murray C. Keene, Jr., p60, April.

CEs' Needs, Leadership Acts On Frank Musica, NSPE-PEPP, p66, April.

Conservation Programs Cause Real Heat Steve Church, ACEC, p30, January.

NFPA Faces Hot Issues Staff, p58, April.

Professionalism, NSPE-PEPP Reaches Out for Frank Musica, p34, February.

Riskless Society, Dealing with a Burt Campbell, FIDIC, p68, January.

Business Aspects

CE Expo 1: On Track to the 21st Century Staff, p50, February.

CE Expo 1 Staff, p44, May.

Construction, 1985 Economic Outlook for William R. Park, P.E., p50, January.

Design Review & Forecast: 1985

Jane Edmunds, A. M. Steinmetz, p36, March.

401(k) Retirement Plan: When Less Equals More Walter B. Sinnott & Edward A. Bryant, p61, April.

Letters Need Plain Talk

Nancy Bornstein, p52, January.

Washington, What to See and Do in Stanley Cohen, Editor, p58, February.

Worth, How Much Is Your Firm Really? Lowell V. Getz, C.P.A, p51, March.

Contract Documents

Construction Bond Forms Clarify Default Process, New Robert E. Vansant, P.E., p82, April.

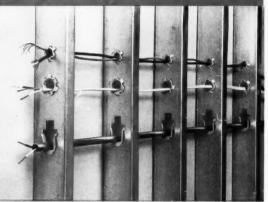
Engineering and Design Concepts

A/E Systems '85

Staff, p57, May.

Awards, ACEC Engineering Excellence Staff, p47, May.

GREENLEE TRI-LOK Insulators and Stud Punches



The Contractor's Choice for wiring through metal studs.

- TRI-LOK insulators lock securely into metal studs from 24 gauge through 10 gauge thickness.
- Protect wire and cable insulation from sharp metal edges.
- Make pulling smooth and easy by preventing hang-ups.
- Insulate against noise when used with metal conduit.



711 Insulator Fits 7/8" hole punched by 709



712 Insulator Fits 1-11/32" hol punched by 710



714 insulator
For manufacturer
prepunched hole
in 1-5/8" stude



For manufacturer prepunched holes in 3-5/8" studs

Stud Punches



No. 709 for punching 7/8" and No. 710 for punching 1-11/32" dia. holes in metal studs up through 20 gauge.

- · Single stroke punching saves time on the job.
- · Automatically centers holes on standard 3-5/8" studs.
- · Self-stripping design eliminates punch hang-ups.
- Contoured handle allows punching of studs as close as 12" centers.



GREENLEE

The Contractor's Choice
GREENLEE TOOL COMPANY
advision of Ex-Cell-O

2330 23rd Avenue Rockford, IL 61108 USA 800/435-0786, in Illinois call 815/399-3903

Circle 288 Reader Service Card

Semiannual Editorial Index _

January-June 1985

Associations

ACEC's Management Clambake In Boston Murray C. Keene, Jr., p60, April.

CEs' Needs, Leadership Acts On Frank Musica, NSPE-PEPP, p66, April.

Conservation Programs Cause Real Heat Steve Church, ACEC, p30, January.

NFPA Faces Hot Issues Staff, p58, April.

Professionalism, NSPE-PEPP Reaches Out for Frank Musica, p34, February.

Riskless Society, Dealing with a Burt Campbell, FIDIC, p68, January.

Business Aspects

CE Expo 1: On Track to the 21st Century Staff, p50, February.

CE Expo 1 Staff, p44, May.

Construction, 1985 Economic Outlook for William R. Park, P.E., p50, January.

Design Review & Forecast: 1985

Jane Edmunds, A. M. Steinmetz, p36, March.

401(k) Retirement Plan: When Less Equals More Walter B. Sinnott & Edward A. Bryant, p61, April.

Letters Need Plain Talk

Nancy Bornstein, p52, January.

Washington, What to See and Do in Stanley Cohen, Editor, p58, February.

Worth, How Much Is Your Firm Really? Lowell V. Getz, C.P.A, p51, March.

Contract Documents

Construction Bond Forms Clarify Default Process, New Robert E. Vansant, P.E., p82, April.

Engineering and Design Concepts

A/E Systems '85

Staff, p57, May.

Awards, ACEC Engineering Excellence Staff, p47, May.

WHEN YOU SPECIFY COHU CAMERAS YOU SET THE STANDARDS.



We invite you to compare our high performance, when considering a surveillance CCTV system. You can expect years of trouble-free service and factory support from the company whose only business is CCTV. COHU gives you a wider flexibility of choices than any other manufac-

Our staff of applications specialists are ready to help you design the most cost effective, high performance and reliable CCTV systems available today for both indoor and extreme environmental applications. Ask for details on our Model 5100 and Model 5800 surveillance cameras.

Contact COHU for More Selection.

Call (619) 277-6700 You'll be glad you did.

COHU

ELECTRONICS DIVISION SAN DIEGO CALIFORNIA

A U.S. PIONEER IN TELEVISION A TRADITION IN QUALITY



P. O. Box 85623, San Diego, CA 92138-5623 Phone (619) 277-6700; TWX 910-335-1244 Circle 271 Reader Service Card District Heating and Cooling: CEs Central to Growth of Field Wyndham Clarke, p67, February.

Denmark's National Strategy
Charles Wendorff, p63, February.

Market With a Multi-Billion Dollar Potential Richard Eckfield, p37, January.

Neglected Concept Needs Federal Nurturing Rep. James L. Oberstar, p44, January.

St. Paul Success Story

James Powers, Birger Abrahamson, p74,
February.

Technology for All Seasons

John K.M. Pryke, P.E., p40, January.

Earthquake Barrier

Marc S. Caspe, P.E., p83, February.

Failureproof Your Projects

Patricia Galloway & Kris Nilsen, p61, June.

Failures in Buildings, Investigating Robert Crist & Jerry Stockbridge, p48, June.

Failures in Engineering: Whose Fault? Neal FitzSimons, p46, June.

Failures, Learning From
Lev Zetlin & James Hinckley, p52, June.

Failures, Put Responsibility Where It Belongs

Garrick Goldenberg, p62, June.

Failures, Structural, A Legal View Donald Ostrower, p58, June.

Fire Detection

Mark L. Rochholz, p54, April.

Fire Suppression
George R. Jerus, P.E., p49, April.

High-Rise Construction, Composite Systems for B. S. Taranath, P.E., Ph.D., p42, March.

Model Codes Struggle to Keep Up Gregory R. Miller, P.E., p42, April.

Smoke Control Richard C. Schulte, P.E., p44, April.

Engineering Economics

Bottom Line, The William R. Park, P.E., p32, April.

Experts, From the Mouths of William R. Park, P.E., p34, May.

Money, Long-Term Markets for William R. Park, P.E., p28, February.

Nuclear Power Play William R. Park, P.E., p78, June.

Value of an Ongoing Business, Fair Market William R. Park, P.E., p72, March.

Legal Aspects

Contribution - A Fair Share Is Not Always Enough Paula M. Gart, p28, March.

There's More To Fire Protection Than Insurance

Insurance provides loss protection, not fire protection. Interam® Fire Protection Products are designed to prevent flame spread and resist heat penetration. In many applications property loss and business interruptions can be minimized when Interam products are included in your active fire protection systems.



Interam products are available in panels, wraps, caulk and putty for systems specifically designed to protect:

- · Structural steel
- · Electrical raceways
- · Control valves
- Piping
- · and more

Fire protection systems designed with Interam products have protected safety related systems in nuclear power plants for years. Over 500 ASTM-E119 and high intensity fire tests at 3M and major independent testing laboratories have validated system designs. Call us for more information: 1-800-328-1687

Interam® Fire Protection Products. Protection when you most need it.

3M hears you...

Ceramic Materials Department/3M

225-4N 3M Center St. Paul, MN 55144

Circle 291 Reader Service Card



Errors in Judgment Not Malpractice James F. Forster, p34, June.

Exculpatory/Indemnification Clauses James F. Forster, p124, February.

Plans, Who Warrants the?

James F. Forster, Esq., p24, May.

Structural Connection: Who is Responsible? Donald A. Ostrower, P.E., p60, January.

Subcontractors, Liability to James F. Forster, p26, April.

Management

Answers: The Key is to Ask the Right Questions Ted Pollock, p70, May.

Help, Don't Be Too Proud to Ask for Ted Pollock, p114, February.

Time Management: How Good Are You? Ted Pollock, p96, April.

Why Managers Should Stay Out of Office Feuds *Ted Pollock*, p74, June.

Marketing Matters

Marketing Is an Internal Matter Andrew Warren Weil, p20, May.

Personal Factor in Marketing

Ann Hardeman, p20, June.

Public Relations and the Art of Getting Published Ann Hardeman, p18, February.

Research, Market

Ann Hardeman, p18, April.

Selling Process, Understanding the Andrew Warren Weil, p22, March.

Strategies, Internal Marketing

Andrew Warren Weil, p16, January.

Microcomputers

Advanced Technology Workstation From IBM:

The A/E Machine?

Jim Seymour, p24, February.

CADD Myths & Realities

Jim Seymour, p26, June.

Hard (Disk) World, It's a

Jim Seymour, p22, April.

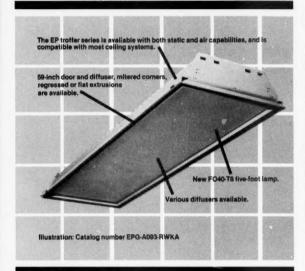
IBM's New Display Devices
And What They Mean for the A/E

Jim Seymour, p66, March.

PC Use, The Broad Scope of Jim Seymour, p16, May.

Software, Selecting Specialized Jim Seymour, p56, January.

Efficiency for the '80s!



Energy consumption is energy consumption is critical in planning today's lighting systems. Now, H.E. Williams, Inc., after three years in development, an-nounces an "Efficiency Plus" line of specificationgrade lighting fixtures. Engineered for the cost-effective '80s, the EP line is the most efficient fixture H. E. Williams has ever made. The photometric data is remarkable. Certified by an independent testing laboratory, the EP series has achieved efficiency ratings as high as 80% and C of U of

Equally impressive test data have been achieved with commercially available lighting diffusers. Indeed, the EP line might well be the most efficient fluorescent fixtures on the market today. With a 15% increase in light output, fewer fixtures are required. The EP family of fixtures is functional, aesthetically pleasing and like energy fluorescent lighting fixtures, they show the superior H.E. Williams craftsmanship. Write or

details.



H.E. WILLIAMS, INC Dedicated to Excellence in Lighting

> 831 Fairview Ave. Box 837 Carthage, MO 64836 417-358-4065

Moving Up

Management Ability, Do You Have? Kenneth Woolf, P.E., Ed.D., p92, February. Sell Your Ideas To Management, How to William S. Pfeiffer, Ph.D., p74, April.

Professional

Negotiated Procurement: Three Cities That Have Seen the Light Michael J. Hartigan, P.E., p79, February. Parsons Brinckerhoff Marks 100th Year Charlotte Forbes, p57, March. Windman, Arnold: Man on the Move Stanley Cohen, p40, May.

Tax Topics

Tax Benefits Require Advance Planning Edward B. Kostin, C.P.A., p40, February. Tax Reform, How Proposals Can Affect Decision-Making Edward B. Kostin, C.P.A., p30, May.

Answer to

Engineering By John Glockler Puzzle

B R A D S C A L A D O A L L S T O R A G B E T T O R H E L I C E	R E S	4.	L	A	C		- 1																					
	_	G	Δ		١	S			D	A	R	В																
BETTOR HELICE	S		T.	R	0	T	S		L	L	A	0	D															
	T	E	C	I	L	E	Н		R	0	T	T	E	В														
TESTER PEADEN		N	E	D		A	E	P		R	E	T	S	E	T													
RAILS SLAMS DT	S	T	D		S	M	A	L	S		S	L	Ι	A	R													
EDGESTARTER				R	E	T	R	A	T	S		E	G	D	E													
MINAEONEREFUS	E	S	U	F	E	R		N	0	E	A		N	I	M													
INERTIATAPERE	D	E	R	E	P	A	T		A	I	T	R	E	N	I													
E G R E S S S E P S E G	G	G	E		S	P	E	S		S	S	E	R	G	E													
MEMBERS UTM	I	M	T	D		S	R	E	В	M	E	M																
AMTAORTAASHE	N	E	H	S	A		A	T	R	0	A		T	M	A													
SEEK LIS ICHAN	G	N	A	H	C	Ι		S	I	L		K	E	E	S													
TRENTON ORIENT		T	N	E	I	R	0		N	0	T	N	E	R	T													
INTERGY CADRE			E	R	D	A	C		Y	G	R	E	T	N	I													
RAHWAY TESS				S	S	E	T			Y	A	W	H	A	R													

Puzzle on page 86.